Comparisons of Job Characteristics

Focus Occupation: Biological Scientists, All Other (19-1029)
Associated Occupation: Forensic Science Technicians (19-4092)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 48

Focus Occupation: Biological Scientists, All Other (19-1029) Associated Occupation: Forensic Science Technicians (19-4092)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Chemistry	4.8	13.1	16.4	>>	Current knowledge level is likely more than sufficient	
Clerical	7.3	12.9	7.3	<<	Extensive education and/or training may be required	
Law and Government	5.9	12.9	4.8	<<	Extensive education and/or training may be required	
Public Safety and Security	6.9	12.0	4.5	<<	Extensive education and/or training may be required	
Biology	3.7	9.3	24.4	>>	Current knowledge level is likely more than sufficient	
Medicine and Dentistry	3.7	6.0	8.3	>>	Current knowledge level is likely more than sufficient	
Geography	3.9	5.7	3.0	<<	Extensive education and/or training may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 88

Focus Occupation: Biological Scientists, All Other (19-1029) Associated Occupation: Forensic Science Technicians (19-4092)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Critical Thinking	10.8	14.1	15.7	Skill level is likely sufficient
Speaking	10.8	13.6	14.0	Current skill level may be sufficient
Writing	9.2	13.5	16.2	> Skill level is likely sufficient
Complex Problem Solving	9.1	12.6	13.1	Current skill level may be sufficient

Active Learning	8.7	11.2	15.0	Skill level is likely more than sufficient
Instructing	7.8	10.6	12.0	Skill level is likely sufficient
Science	4.5	9.8	16.1	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 88

Focus Occupation: Biological Scientists, All Other (19-1029) Associated Occupation: Forensic Science Technicians (19-4092)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Flexibility of Closure	7.8	16.0	11.4	<<	Extensive improvement in abilities may be required
Deductive Reasoning	10.6	15.1	15.6	0	Current ability level may be sufficient
Near Vision	11.1	15.1	13.9	0	Current ability level may be sufficient
Problem Sensitivity	11.1	14.4	14.4	0	Current ability level may be sufficient
Inductive Reasoning	10.2	14.3	16.1	>	Current ability level is likely sufficient
Information Ordering	9.9	12.9	13.0	0	Current ability level may be sufficient
Far Vision	7.8	12.5	9.8	<	Some improvement in abilities may be required
Category Flexibility	9.0	12.0	13.2	0	Current ability level may be sufficient
Speed of Closure	5.9	11.2	6.9	<<	Extensive improvement in abilities may be required
Perceptual Speed	7.4	11.1	8.5	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 42

Focus Occupation: Biological Scientists, All Other (19-1029) Associated Occupation: Forensic Science Technicians (19-4092)

Tools and Technologies	Exclusivity
Autoclave and sterilizer equipment and accessories	12
Computers	1
Content authoring and editing software	1
Data management and query software	1
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Laboratory centrifuges and accessories	13

Laboratory heating and drying equipment	13
Laboratory mixing and stirring and shaking equipment and supplies	19
Network applications software	1
Safety apparel	4
Spectroscopic equipment	10
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Weight measuring instruments	7

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.